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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,197	08/18/2003	Youichi Hidaka	MA-581-US	1118

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VIENNA, VA 22182-3817

EXAMINER
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WALSH, JOHN B

ART UNIT	PAPER NUMBER
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2151

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/642,197	<b>Applicant(s)</b> HIDAKA ET AL.	
	<b>Examiner</b> John B. Walsh	<b>Art Unit</b> 2151	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/29/03, 1/9/07</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the relay process". There is insufficient antecedent basis for this limitation in the claim.

Claims 2-7 and 9 recite "element". It is unclear if the applicant is claiming another element or referring to the element of claim 1.

Claims 3-5 recite the limitation "the forwarding table memory". There is insufficient antecedent basis for this limitation in the claims.

Claims 5 and 14 recite the limitation "the input port", "the destination MAC address", "the source MAC address" and "the TYPE field information". There is insufficient antecedent basis for these limitations in the claims.

Claim 9 recites the limitation "the self-node status". There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the node status". There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites "A frame transfer method". However the body of the claim recites only a single step. It is unclear how the method of transferring a frame is accomplished by a single

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step which comprises either inserting tags or removing tags. These steps do not accomplish the intended method of transferring frames and therefore render the claim unclear and indefinite.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-19 as best understood are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,072,346 to Hama.

As concerns claim 1, a node to relay the Ethernet frame comprising: element which inserts two or more VLAN tags (column 5, lines 6-16; column 5, line 58; headers) into said frame and removes said inserted VLAN tag in the relay process of said frame (column 3, line 5; column 5, line 63).

As concerns claim 2, a node as set forth in claim 1 further comprising element which replaces two or more VLAN tags of said frame at a time (column 5, lines 6-16; column 5, line 58).

As concerns claim 3, a node as set forth in claim 1 further comprising: element which administrates said two or more VLAN tags using the forwarding table memory (column 7, line 46; column 12, lines 53-54) for change of frame contents during frame relay.

As concerns claim 4, a node as set forth in claim 1 further comprising element which searches the forwarding table memory (column 7, line 46; column 12, lines 53-54) using the information from two or more VLAN tags in said frame during frame relay.

As concerns claims 5 and 14, further comprising element which searches the forwarding table memory (column 7, line 46; column 12, lines 53-54) in the relay process of said frame with combining the information from two or more VLAN tags in said frame and the input port, the destination MAC address, the source MAC address and the TYPE field information.

As concerns claims 6 and 15, further comprising element which provides a TTL area (figure 17B) to show the survival time of the frame in said VLAN tag inserted to said frame and checks whether said survival time has elapsed or not by the value in said TTL area and discards said frame after elapse of said survival time without relaying it in the relay process of said frame.

As concerns claims 7 and 16, further comprising element which decrements the value in said TTL area (figure 17B) by one every time said frame is relayed.

As concerns claims 8 and 17, wherein node control information (figure 4, 17A; column 5, lines 12-15) is stored to said VLAN tag.

As concerns claims 9 and 18, further comprising element which changes the self-node status (figure 4, 17A; column 5, lines 12-15) administration corresponding to the contents of said VLAN tag.

As concerns claims 10 and 19, wherein the node status is stored to the area of said VLAN tag in the relayed frame corresponding to the self-node status (figure 4, 17A; column 5, lines 12-15).

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As concerns claim 11, a frame transfer method of the node to relay the Ethernet frame comprising a step of inserting two or more VLAN tags to said frame at a time or removing said inserted VLAN tags in the relay process of said frame (column 3, line 5; column 5, line 63).

As concerns claim 12, a frame transfer method as set forth in claim 11 wherein a forwarding table memory (column 7, line 46; column 12, lines 53-54) for frame contents change during frame relay is used for administration of said two or more VLAN tags.

As concerns claim 13, a frame transfer method as set forth in claim 11 wherein a forwarding table memory (column 7, line 46; column 12, lines 53-54) is searched during frame relay using the information from two or more VLAN tags in said frame (column 5, lines 5-20).

### *Conclusion*

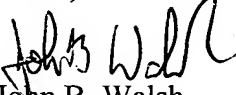
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John B. Walsh  
Primary Examiner  
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